

WHAT IS CLAIMED IS:

1. A server system for processing a service request from a client in a network processing environment, comprising:
 - a front-end server for receiving a service request from the client and for generating a data link frame containing a service command necessary to perform the service request; and
 - at least one back-end server connected to the front-end server through a data link, without establishing a transmission control protocol/Internet protocol (TCP/IP) connection, for executing the service command in the data link frame received from the front-end server through the data link and for sending a result of the service command to the client bypassing the front-end server in a pseudo packet that would be recognized by the client as a packet originating from the front-end server.
2. The system of Claim 1, wherein said pseudo packet contains an IP address and a port number corresponding to the front-end server.
3. The system of Claim 2, wherein said pseudo packet is a pseudo TCP packet containing a TCP header.
4. The system of Claim 2, wherein said pseudo packet is a pseudo user datagram protocol (UDP) packet containing a UDP header.
5. The system of Claim 1, wherein the front-end server is a database (DB) server.
6. The system of Claim 1, wherein the front-end server is a file server.

7. The system of Claim 1, wherein the front-end server is a mail server.
8. The system of Claim 1, wherein the front-end server is a printer server.
9. The system of Claim 1, wherein the front-end server is a firewall server.
10. The system of Claim 1, wherein the back-end server further comprises:
 - a state machine for controlling packet generation and transmission;
 - a command decoder for decoding a command received from the front-end server;
 - a pseudo packetizer for assembling said pseudo packets;
 - a network interface card (NIC) controller for controlling an NIC;
 - a disk controller for controlling a disk;
 - a compact disk (CD) controller for controlling an output from a CD; and
 - a memory controller for controlling memory.
11. An asymmetric 3-way TCP system for processing a service request from a client in a network processing environment, comprising:
 - a client issuing a service request;
 - a front-end server for receiving the service request from the client and for generating a data link frame containing a service command necessary to perform the service request; and
 - at least one back-end server connected to the front-end server, without establishing a TCP/IP connection, through a data link for receiving the service command contained in the data link frame from the front-end server through the data link and for sending a result of the service command to the client bypassing the front-end server in a packet containing a TCP header and an IP header that would be recognized by the client

as a TCP packet originating from the front-end server, without modifying a port number included in the packet, wherein the port number is expected by the client.

12. An asymmetric 3-way UDP system for processing a service request from a client in a network processing environment, comprising:

a client issuing a service request;

a front-end server for receiving the service request from the client and for generating a data link frame containing a service command necessary to perform the service request; and

at least one back-end server connected to the front-end server through a data link, without establishing a TCP/IP connection, for receiving the service command contained in the data link frame from the front-end server through the data link frame and for sending a result of the service command to the client bypassing the front-end server in a packet containing a UDP header and an IP header that would be recognized by the client as a UDP packet originating from the front-end server.

13. A method for processing a service request from a client in a network processing environment, comprising the steps of:

receiving a service request from the client by a front-end server;

generating a data link frame containing a command necessary to perform the service request to a back-end server connected to the front-end server, without establishing a TCP/IP connection, through a data link;

executing the command contained in the data link frame received through the data link by the back-end server;

assembling, by the back-end server, a pseudo packet bearing a result of the command that would look like a packet originating from the front-end server; and

sending the pseudo packet by the back-end server to the client bypassing the front-end server.

14. The system of Claim 13, wherein said pseudo packet is a pseudo TCP packet containing a TCP header.

15. The system of Claim 13, wherein said pseudo packet is a pseudo UDP packet containing a UDP header.

16. A computer-readable medium containing a computer program which can be run in a computer to perform the steps of:

receiving a service request from a client;

generating, by the front-end server, a command necessary to perform the service request and sending the command to a back-end server connected to the front-end server, without establishing a TCP/IP connection, through a data link;

executing the command by the back-end server;

assembling a pseudo packet bearing a result of the command that would look like a packet originating from the front-end server by the back-end server; and

sending the pseudo packet by the back-end server to the client bypassing the front-end server.

17. The computer-readable medium of Claim 16, wherein said pseudo packet is a pseudo TCP packet containing a TCP header.

18. The computer-readable medium of Claim 16, wherein said pseudo packet is a pseudo UDP packet containing a UDP header.

19. The computer-readable medium of Claim 16, wherein the medium is a CD.